

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF PENNSYLVANIA/MAUGANS AVENUE AND MACK TRUCK ROAD/MAUGANS AVENUE. NEW TRAFFIC SIGNALS WILL BE CONSTRUCTED AT THE INTERSECTIONS OF MAUGANS AVENUE AND THE INTERSTATE 81 RAMP/MAUGANS AVENUE AND CONDUIT PLACED FOR FUTURE SIGNALS AT MAUGANS AVENUE AND CRAYTON BOULEVARD. MAUGANS AVENUE IS ASSUMES TO RUN IN A EAST-WEST DIRECTION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING FOUR (4) NEMA PHASES. EXCLUSIVE/PERMISSIVE LEFT TURN PHASING WILL BE PROVIDED FOR EAST AND NORTHBOUND APPROACHES.

INSTALL A FULL-TRAFFIC ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR CHANNEL, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSSES IN A NEMA SIZE "6" BASE MOUNTED CABINET.

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY DAVE SHRADER OF THE WASHINGTON COUNTY HIGHWAY DEPARTMENT AT 240-313-2715 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SHRADER THE NEAREST STREET ADDRESSES, ZIP CODES, AND PHONE NUMBERS FOR EACH INTERSECTION.

THE TRAFFIC CONTROL PLANS PROVIDED WITHIN THIS SET OF CONSTRUCTION PLANS SHALL BE USED FOR THE PROJECT.

THE CONTACT PERSONS FOR THE WASHINGTON COUNTY ENGINEERING DEPARTMENT AS FOLLOWS:

MR. DAVE SHRADER
SIGNAL OPERATIONS
PHONE: 240-313-2720

MR. ROBERT SLOCUM
DEPUTY CHIEF ENGINEER
PHONE: 240-313-2418

MR. MIKE STOCKER
SIGNAL SHOP WAREHOUSE
(410) 787-7696

A. EQUIPMENT TO BE SUPPLIED BY SHA

42 S.F. SHEET ALUMINUM SIGNS TO CONSISTS OF:

- 1 EACH R3-1 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT
- 1 EACH R3-2 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT
- 1 EACH R3-5L SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT
- 2 EACH 3-4 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT
- 1 EACH S-4 SIGN (16 IN. X 39 IN.) - MAST ARM MOUNT
- 1 EACH S-7 SIGN (24 IN. X 30 IN.) - MAST ARM MOUNT

1 EACH VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

B. EQUIPMENT TO BE FURNISHED AND OR INSTALLED BY THE CONTRACTOR

QUANTITY	DESCRIPTION
LUMP SUM	MAINTENANCE OF TRAFFIC
20 C.Y.	TEST PIT EXCAVATION
1 EACH	STEEL POLE WITH TWIN 50 FT. MAST ARMS
1 EACH	STEEL POLE WITH 50 FT. MAST ARMS
1 EACH	STEEL PEDESTAL POLE
9 C.Y.	CONCRETE FOR SIGNAL FOUNDATIONS
460 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
480 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
100 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
190 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
40 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
180 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
230 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
120 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
190 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
20 L.F.	1 INCH FLEXIBLE TUBING
1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT W/ 200 AMP METER PEDESTAL
3 EACH	FURNISH AND INSTALL OPTICOM EMERGENCY VEHICLE PRE-EMPTION DETECTOR EYE
75 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
9 EACH	FURNISH AND INSTALL HANDHOLE
42 S.F.	INSTALL OVERHEAD AND POLE MOUNTED SIGN
3 EACH	VIDEO DETECTION CAMERA
2 EACH	CONTROL CABLE, 150 FT, VIDEO CAMERA TO CONTROLLER
1 EACH	CONTROL CABLE, 200 FT, VIDEO CAMERA TO CONTROLLER
1 EACH	10 FOOT BREAKAWAY PEDESTAL
2 EACH	FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
2 EACH	15 FT LIGHTING ARM
6 EACH	GROUND ROD - 0.75 INCH DIAMETER X 10 FT LENGTH
3 EACH	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
25 EACH	12 INCH LEC VEHICULAR TRAFFIC SIGNAL HEAD SECTION
250 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
350 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
420 L.F.	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
50 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
490 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
660 L.F.	ELECTRICAL CABLE - 24 CONDUCTOR (NO. 14 AWG)
90 L.F.	SAW CUT FOR SIGNAL (QUADRAPOLE)
1 EACH	INSTALL MASTER CONTROLLER AND CABINET - BASE MOUNT

1 STATION/OFFSET LOCATIONS ARE BASED ON THE APPROXIMATE CENTER OF THE HANDHOLE.
2 STATION/OFFSET LOCATIONS ARE BASED ON THE CENTER OF THE POLE.
3 STATION/OFFSET LOCATIONS ARE BASED ON THE CENTER OF THE CONTROLLER BOX.

<p><i>Don J. [Signature]</i> 10/26/86</p> <p>TEAM LEADER - TRAFFIC ENGINEERING DESIGN DIVISION</p> <p><i>[Signature]</i></p> <p><i>Don Mickey Rucker</i></p> <p>ASSISTANT - TRAFFIC ENGINEERING DESIGN DIVISION</p>	<p><i>Woody Kord</i> 10/26/86</p> <p>CHIEF - TRAFFIC ENGINEERING DESIGN DIVISION</p> <p><i>Lee Stille</i> 10/21/86</p> <p>1st DIRECTOR - TRAFFIC AND SAFETY</p>
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SHA No.: BW707M83
Maughan's Avenue: I-81 to US 11

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 MAUAGNS AVENUE AND
 I-81 NORTHBOUND RAMPS
 TRAFFIC SIGNAL PLANS

**MAUGANS AVE. & PENNSYLVANIA AVE.
RECONSTRUCTION**

SIGNAL PLANS - NOTES

I-81 NORTHBOUND RAMP

SCALE
AS SHOWN

SHEET NO.
SP-04

PROJECT NO. 10-14

DWG. No. 61 OF 14